

Human Factors Analysis Support Tool (H-FAST), Phase II

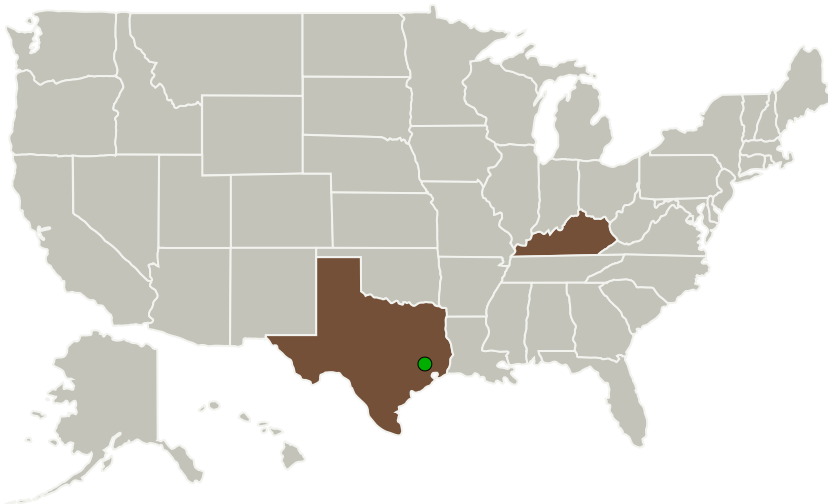
Completed Technology Project (2011 - 2013)



Project Introduction

Designing complex systems, such as those used by NASA, requires a coordinated effort among a variety of engineering teams. In order to be successful, the human-computer interactions in these systems need to follow a principle-based design process. In Phase II, TiER1 and Alion propose to continue development on HFE-AT, renaming it and creating a Human Factors Analysis Support Tool (H-FAST), which will provide human factors guidance and support to engineering design teams. This tool will be used throughout the design lifecycle, and will provide inputs to engineers and program managers to help them identify and avoid potential human factors problems early in the design process. It also will provide detailed guidance regarding human factors evaluations, and it will store data and provide feedback on the results of these evaluations. H-FAST will improve the engineering design process by providing engineers with easy access to detailed human factors methods, relevant research, and subject matter expert contact information. This will empower engineers to create more usable systems, thus reducing the number of design iterations and resulting in higher-quality products.

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
TiER1 Performance Solutions	Lead Organization	Industry	Covington, Kentucky
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

Primary U.S. Work Locations	
Kentucky	Texas

Project Transitions

**June 2011:** Project Start**June 2013:** Closed out**Closeout Documentation:**

- Final Summary Chart(<https://techport.nasa.gov/file/139090>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

TiER1 Performance Solutions

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

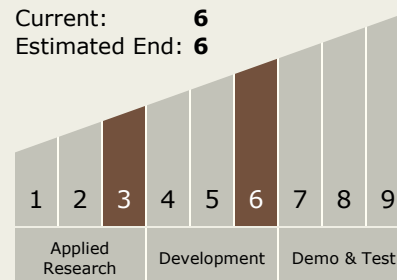
Carlos Torrez

Principal Investigator:

Terence Andre

Technology Maturity (TRL)

Start: 3
 Current: 6
 Estimated End: 6



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Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
 - └ TX06.6 Human Systems Integration
 - └ TX06.6.1 Human Factors Engineering

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System